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March 27, 2018

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Room TW-A325
Washington, D.C. 20554

Re: ET Docket No. 08-59, *Amendment of the Commission's Rules to Provide Spectrum for the Operation of Medical Body Area Networks*

ET Docket No. 14-165, *Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37*

WC Docket No. 17-310, *Promoting Telehealth in Rural America*

WT Docket No. 16-290, *TerreStar Corporation Request for Relief of Certain 1.4 GHz Construction Requirements*

Dear Ms. Dortch:

GE Healthcare ("GEHC"), through its counsel, takes this opportunity to respond to the Enterprise Wireless Alliance's ("EWA") filing dated February 13, 2018.[1] In its filing, EWA suggests that the Federal Communications Commission ("FCC" or "Commission") contact proponents of Medical Body Area Networks ("MBANs") to "determine if this is a service they intend to develop."[2]

[1] *See* Letter from Mark E. Crosby, President/CEO, EWA, to Marlene H. Dortch, Secretary, FCC, ET Docket Nos. 08-59, 14-165, WC Docket No. 17-310, WT Docket No. 16-290 (filed Feb. 13, 2018).

[2] *Id*. at 2.

GEHC is committed to MBAN development. Indeed, GEHC has progressed diligently with the development and testing of MBAN technologies since the FCC modified its Part 95 rules in 2012 to allow MBAN devices to be deployed in the 2360-2400 MHz band.[3] Connected medical devices, however, typically require more time to develop than other types of connected devices. Manufacturers must spend significant time designing, developing and testing medical devices to ensure the safety and efficacy of the product given its application in assisting clinicians in their treatment of their critically ill patients. And, in the case of MBAN devices, developers experienced coordination and measurement procedure issues that created additional market uncertainty and delays.[4]

Despite these challenges, GEHC expects to make MBAN-enabled products available, including physiological sensors. GEHC has also partnered with the VTT Technical Research Center of Finland and several Finnish companies to develop new wearable patient monitoring solutions.[5] Among other things, this partnership aims at developing a patient monitoring platform "with which wearable devices gather all the vital signs' data as the patient progresses along the care pathway – seamlessly from the ICU to the ward and on to the home."[6] Moreover, once body-worn wireless medical sensors begin to be deployed, they are expected to "rise to prominence very quickly."[7]

In addition, GEHC notes that recent developments in other countries may help accelerate the development of MBAN devices. For example, the European Union is in the midst of gaining country-by-country approval for MBAN use in the 2483.5-2500 MHz band.[8] And, in November

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[3] *See Amendment of the Commission's Rules to Provide Spectrum for the Operation of Medical Body Area Networks*, ET Docket No. 89-59, First Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 6422 (2012).

[4] *See, e.g.*, Comments of GEHC on the FCC Office of Engineering and Technology Laboratory Division's October 15, 2015 Draft Publications Report (filed Nov. 20, 2015), available at https://apps.fcc.gov/eas/comments/GetPublishedDocument.html?id=403&tn=433449.

[5] *See* Finland Health, Digital Health Solutions Promise Faster Patient Discharge (Nov. 14, 2016), http://www.finlandhealth.fi/-/digital-health-solutions-promise-faster-patient-discharge.

[6] *Id.*

[7] *See, e.g.*, Jonah Comstock, *2018: 5 million disposable, mobile medical sensors*, MOBILE HEALTH NEWS (May 3, 2013) (reporting that ABI analysts expect disposable MBAN sensor shipments to reach five million by 2018), http://www.mobihealthnews.com/22089/2018-5-million-disposable-mobile-medical-sensors.

[8] *See* European Telecommunications Standards Institute, *Short Range Devices (SRD); Medical Body Area Network Systems (MBANSs) operating in the 2 483,5 MHz to 2 500 MHz range; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU*, Draft ETSI EN 303 203 V2.1.0 (2015); European Conference of Postal and Telecommunications Administrations, Electronic Communications Committee, *Relating to the use of Short Range Devices (SRD)*, ERC Recommendation 70-03 (2017).

2017, the Australia Communications and Media Authority ("ACMA") sought comment on its proposal to support MBAN devices in the 2483.5-2500 MHz band.[9] These and similar developments will broaden the addressable market and provide even further incentive for device manufacturers to speed the release of MBAN-enabled products.

Consistent with Section 1.1206(b) of the Commission's rules, please associate this letter with the above-referenced docket.

Sincerely,

/s/ Ari Q. Fitzgerald

Ari Q. Fitzgerald
Counsel to GE Healthcare

[9] *See* ACMA, Proposed Variation to the Radiocommunications (Low Interference Potential Devices) Class License 2015, Discussion Paper (Nov. 2017), https://www.acma.gov.au/theACMA/variations-to-the-lipd-class-licence-2.